

**June 1, 2001**

# **Conservation and Renewables Discount Program Up Date**

**Note: This Program Up Date replaces the April 16<sup>th</sup> Program Up Date. Much of the material in this version is new, however some of the information on specific subjects has been up dated.**

## **Regional Issues**

**Will a Utility's Commitment to the Rate Mitigation Action and the 10% Reduction in Load Result in a Reduction of a Utility's C&RD Eligibility?**

**No.** Bonneville felt that asking customers to reduce their actual load and to increase their energy conservation efforts would send the wrong message. Customers should not lose conservation funding as a result of doing the right thing.

Therefore, for the purposes of the C&RD, load reductions resulting from Bonneville's Rate Mitigation Actions will not be deducted from a customer's Net Requirements Forecast when determining a customer's C&RD eligibility.

**Will Utilities Who Currently Spend More than 3% of their Retail Revenues on Conservation or Renewables lose their Incremental Certification Exemption if they increase their Retail Rates?**

The C&RD Implementation Manual states the following:

"Section 2.10 - Exemptions: ... any public utility that spends 3 percent or more of their retail revenues on qualifying conservation and/or renewable investments, during the year being reported, then those expenditures will be deemed as incremental budget increases. [GRSPs Section II. (A)(4)(d)]"

Bonneville felt that a literal interpretation of this requirement would be a disincentive for customers who have actively pursued conservation in recent years, despite a lack of Bonneville funding. It would also mean that these same customer would likely have to increase their conservation spending in order to be able to claim that their C&RD activity is incremental to what they would have done absent the C&RD. It is important for, customers to have some stability around which to plan their conservation budgets. The fact that Cost Recovery Adjustment Clause (CRAC) adjustments could change every six months makes this difficult, if not impossible to do.

Therefore, retail revenues, for the purposes of the 3% exemption will be based on what a customer's retail revenues would have been absent CRAC. Utility customers that intend to apply for the 3% exemption will need to determine what their retail revenues would have been, absent the increase due to CRAC.

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**Agreed-Upon Audit Procedures.** The C&RD Implementation Manual requires that the customer's State Auditor (WA) or CPA firm provide the utility with a letter stating that the utility's policies, procedures and accounting system are adequate to document the utility's activities under the C&RD. Utilities will be requested to submit a copy of this letter to Bonneville by October 1, 2001.

Initially the participant selects the program options. Then the participant submits to BPA documentation describing the policies, procedures and accounting system that will be used to support program reports and reimbursements.

Initially the participant's CPA firm is expected to provide a letter which will be sent by the participant to BPA, confirming that the, policies, procedures and accounting system which have been described to BPA actually exist. Subsequently, in conjunction with their annual audit, the CPA firm will perform agreed-upon procedures to assure that the reports submitted to BPA are supported by the systems described.

The specific agreed- upon procedures will be negotiated between the participant and the CPA firm. However, at a minimum, these will include steps to verify that the total reimbursements claimed are based on the systems described to BPA and were computed in accordance with contract terms.

If the auditors need additional clarification about what is needed they should contact Neil Gorter in BPA's Audit Office at (503) 230-3438.

**Washington Utilities Only:** Workload scheduling by the Washington State Auditors Office (WSAO) will affect their ability to provide the initial letter and to perform the agreed-upon reviews in a timely manner. Participating utilities who are audited by the WSAO should contact the auditor responsible for their audit as soon as possible to discuss these reporting requirements and to make arrangements to have the work performed.

## **Training, Space is still Available, Act Soon**

**Auditor/Inspector Certification** - NWPPA has agreed to develop and sponsor the Auditor/Inspector Training. The Auditor Training has been scheduled to be held in Portland June 18<sup>th</sup> through June 22<sup>nd</sup> and Inspector Training will be held at the same location June 25<sup>th</sup> through June 27<sup>th</sup>. One other session will be held in Spokane in September 2001. Customers wishing to enroll in either of these training sessions should contact Jim Brands at the NWPPA. His number is (360) 254-0109.

**PTCS Inspector Certification** – The first PTCS inspector training will be held in Portland on June 28<sup>th</sup> and 29<sup>th</sup>. The purpose of this training is to teach utility staff how to prescreen to determine if a home ducting system would benefit from PTCS and how to do quality control inspections after the work has been done. Other sessions will be made available as interest dictates at later dates and locations regionwide. Customers wishing

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to enroll in this training session should contact Jim Brands at the NWPPA. His number is (360) 254-0109.

Training Subject	Dates	Location
Auditor Training	June 18 thru June 22	Portland, OR
Inspector Training	June 25 thru June 27	Portland, OR
PTCS Training	June 28 & 29	Portland, OR

## **Appendix L - Residential Sector Deemed Measure Summary**

A new version of Appendix L is now available as of June 1st. Deemed values have not changed from the previous version. There have been several additions however. Per square foot values have been added for Energy Star Windows, as well as for attic/roof, walls and floor insulation up grades for weatherization projects. Additional Heating/Cooling Zone combinations that were missing from the earlier version of Appendix L have also been added. Significant changes are explained in more detail below.

**Heating Zones and Cooling Zones** – As mentioned in the April 16<sup>th</sup> Program Update, the RTF will be changing from three Climate Zones to a combination of three Heating Zones and three Cooling Zones. In Appendix L – Residential Sector Deemed Measure Summary measures are organized according to Heating Zone, Cooling Zone, and Heating and Cooling Zones. This means where there used to be only three Climate Zone designations there are now nine Heating and Cooling Zone combinations, as well as Heating-only and Cooling-only designations.

**Walls, Attics, and Floors** – In earlier versions of Appendix L - Residential Sector Deemed Measure Summary for Residential Weatherization, three Major Measures were required to qualify for the C&RD Credit listed. Now there are separate listings for Walls, Ceilings, and Floors with appropriate values for each measure, in addition to the full Weatherization measure. To qualify for these values, walls are assumed to have no insulation present and attics have R19 or less.

Single Family	Heating Zone 1	Heating Zone 2	Heating Zone 3
Walls (per sq. ft.)	\$ 1.73	\$ 2.54	\$ 2.98
Attics (per sq. ft.)	\$ 0.27	\$ 0.41	\$0.48
Floors (per sq. ft.)	\$ 0.15	\$ 0.23	\$0.27

Slightly lower values are also listed in Appendix L for multi-family housing and manufactured homes. Single family, multi-family, and manufactured homes weatherization value are found in Heating categories 1, 2, and 3.

**Energy Star Prime Window Replacements** are now listed by square foot of window installed. These can replace single pane, single pane with storm windows, and double paned aluminum framed windows. Energy Star Prime Window Replacements now qualify as a stand alone measure.

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Window Replacements	Heating Zone 1	Heating Zone 2	Heating Zone 3
Single Family (per sq. ft.)	\$ 5.33	\$ 7.12	\$ 8.53
Multi Family (per sq. ft.)	\$ 4.05	\$ 5.45	\$ 6.55
Manuf. Homes (per sq. ft.)	\$ 3.48	\$ 5.32	\$ 6.30

Due to less stringent building codes in Idaho and Montana, Energy Star Windows are also listed in Appendix L for new multi-family construction in those states.

Multi Family - New Construction	Heating Zone 1	Heating Zone 2	Heating Zone 3
	ID Only	ID & MT Only	ID & MT Only
(per sq. ft.)	\$ 4.05	\$ 5.45	\$ 6.55

**Domestic Water Heaters (DWH)** – Many have noticed that the DWH heater deemed values seem to be changing. The April 19<sup>th</sup> version of Appendix L listed the following water heaters and C&RD Credit amounts.

**April 19<sup>th</sup> Domestic Water Heater List**

Water Heater EF & Size	Annual Savings	C&RD Credit
<b>EF-90 65 gallon DWH</b>	208 kWhs	\$63
<b>EF-91 40 gallon DWH</b>	162 kWh	\$49
<b>EF-91 50 gallon DWH</b>	203 kWh	\$62
<b>EF-92 30 gallon DWH</b>	157 kWh	\$48

As you will notice, these Efficiency Ratings (EF) are lower than Bonneville has required in the past. GAMA found that many of the DWH that it had been listing as at least 93% efficient were actually less, and reduce the EF accordingly. In the April edition of the GAMA Directory, some of the DWH heaters that it had de-listed have been put back on the list. So what the RTF had earlier thought was the most efficient DWH heater available has been replaced with a more efficient model on the GAMA list.

With the new GAMA listing, higher additional DWH became the most efficient available. Listed below are those additions.

**June 1<sup>st</sup> Domestic Water Heater List**

Water Heater EF & Size	Annual Savings	C&RD Credit
<b>EF-89 80 gallon DWH</b>	214	\$ 79
<b>EF-91 65 gallon DWH</b>	247	\$ 91
<b>EF-93 50 gallon DWH</b>	278	\$ 102
<b>EF-94 40 gallon DWH</b>	285	\$ 105
<b>EF-95 50 gallon DWH w/ plastic tank minimum 20 yr warranty</b>	351	\$ 129
<b>EF-96 30 gallon Domestic Water Heater</b>	288	\$ 106

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Bonneville will provide a C&RD Credit for DWHs on either the April 19<sup>th</sup> or the June 1<sup>st</sup> list. However the DWHs on the April 19<sup>th</sup> list will only qualify until October 1, 2001 after which time only the DWHs on the June 1<sup>st</sup> list will qualify. If a utility has yet to determine what DWHs to incent, they should use the June 1<sup>st</sup> list.

**Performance Tested Comfort Systems (PTCS)** is an energy efficiency measure that improves the efficacy of both a heating/cooling systems ductwork and the performance of the actual equipment itself. A short description of what each involves is described below.

***PTCS Duct Sealing*** requires that the ducting system be tested and leaks sealed according to PTCS specifications. PTCS applies to all ducted heating and cooling systems, i.e. forced air furnace and heat pumps. It also applies where a new central heating system is installed or there is a conversion from zonal heat or furnace to a heat pump. There is no non-PTCS option for ducts only in Appendix L.

***PTCS O&M Servicing*** applies to furnaces, heat pumps and central air conditioning. PTCS certification (and related specifications and procedures) exist for all three. PTCS specifications for new equipment (e.g. heat pump conversions or upgrades) presently do not exist. However, the C&RD list shows PTCS ducts and O&M servicing as a requirement for new HP installations or conversions. There is also an alternative without PTCS ducts but with PTCS O&M servicing.

***PTCS Duct Sealing or PTCS System O&M and Weatherization*** is a combination of claiming savings for the PTCS measure at the same time as savings are claimed for the insulation of attic, walls, and floors.

**Geothermal Heat Pump Conversion with PTCS** refers to PTCS Duct Sealing in combination with the heat pump conversion. Geothermal heat pump conversion can also be done without PTCS duct sealing.

**Solar Domestic Hot Water Heaters (DWH)** For residential Solar DHWs, utilities will be required to use EWEB's Brighter Way Solar Hot Water Heater specifications and quality assurance requirements in order to qualify for the C&RD Credit. The reason that the Regional Technical Forum specified the EWEB specifications was that it was the only reliable source of data to base a deemed value on that included both installation specifications and maintenance requirements. We agree with EWEB, that the future operation of these systems is extremely important.

Bonneville looked into the purchasing the rights to use EWEB's Brighter Way Solar Hot Water Heater specifications and quality assurance requirements for the C&RD Program. Being unable to determine the number of units that might be installed, it was hard to rationalize a price per installed unit.

Utilities that want to claim C&RD Credit for Solar DWHs will need to purchase the right to use EWEB's Brighter Way Solar Hot Water Heater specifications and quality assurance requirements. Bonneville, on a case by case basis, will assist utilities with the contractor training costs that the program requires.

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Commercial Solar Hot Water Systems are not required to be installed per EWEB's Brighter Way Solar Water Heater specifications. Since these types of systems will need to be verified in some manner, such as before and after metering, it was not necessary to require a specific specification.

## **Commercial Sector (Con/Aug) Limited Standard Offer (LSO)**

Commercial Sector Deemed Measure Values are not as well developed as the Residential Sector Measure Values are. Currently there are three ways to qualify commercial sector energy efficiency measures for C&RD credit. One way is to find the measure in Appendix M1, which only has values for commercial lighting retrofits. The second way is to use the Deemed Calculation Method, an Excel spreadsheet, in Appendix M2, which is based on the wattage reduction and associated energy savings. And the third is using a site-specific commercial protocol, which involve an engineering estimate, with before and after metering to determine the actual energy savings.

If you think this is a little confusing and a bit complex for small projects, let alone being able to explain it to Commercial Lighting Contractors, you are not alone. Many commercial lighting measures are not covered by the first two methods and the third method was only intended for large commercial projects. Since it is Bonneville's intent that customers find ways to reduce load quickly, losing commercial sector savings is not acceptable.

To help bridge the gap, Bonneville has decided to offer customers the use of the Con/Aug Commercial Lighting Limited Standard Offer (LSO) as a basis for designing their Commercial Sector Conservation Programs. Customers can use the measures, methodology and values as the basis for their program design. The LSO covers multiple types of lighting technologies, as well as programmable thermostats and occupancy sensors. BPA will ensure that a utility's C&RD credit will not be less than the LSO values, until such time as the RTF commercial sector material is more mature.

**LED Traffic Lights and VendingMi\$er™** - There are now deemed values for LED Traffic Lights and VendingMi\$er™.

**VendingMi\$er™.** The VendingMi\$er™ is a "plug and play" device that reduces energy consumption of vending machines. Bonneville has a contract with the manufacturer, Bayview, to direct install VendingMi\$er™ on vending machine, regionwide, under Con/Aug contracts with utilities. Bonneville's contract with Bayview pays them \$155 per unit installed. Customer's that sign Vending Mi\$er Con/Aug Contracts with Bonneville will be expected to assist beverage distributors in locating vending machines in their service territories.

Bayview will perform all the installations if the Utility so chooses. The installations will be accomplished through soft drink distributors and major bottlers and through specially trained installation teams. The Utility may choose other means of installing VM,

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however our research indicates that allowing Bayview to do the installation is generally the lowest-cost alternative.

Bonneville will credit customers, at the same contractual price we pay under the Bayview contract for a direct install, regardless of the C&RD option (Option A or B) a customer chooses to use. The C&RD credits will not change based on the machine configuration, because the costs won't vary.

Bayview will track the type and location of installations. All participating utilities will receive a detailed listing of the installations in their service territory. A Turnkey implementation strategy will quickly and effectively provide significant load reduction with minimal administrative and marketing costs.

## **Customer System Efficiency Improvements and Industrial Projects**

**Customer System Efficiency Improvements** to a customers transmission and distribution system qualify for credit under the C&RD. Bonneville will pay 80% of the value to the energy savings to the bulk power system for such projects. Currently we are working on engineering protocols for reconductering, transformer replacements, conservation voltage reduction, and system voltage upgrades. Please contact your Energy Efficiency Representative if you have questions or would like assistance in determining your C&RD Credit for such projects.

**Protocol-Based Savings for Site Specific Projects (Appendix P).** The Regional Technical Forum (RTF) believes that there is a need for an independent review of the application of its protocols for estimating energy savings by customers who are participating in the C&RD. Therefore, it recommends that Bonneville require participating customers to submit their savings estimation and verification plans to Bonneville, the RTF or designated Contractors for review for *consistency with the intent* of energy savings protocols provided in Appendix P.

On a voluntary basis, the RTF would like customers to submit the post-installation verification reports and the results to the RTF. The RTF will review these reports to determine whether the evaluation methods used could be replicated by others, whether the results could be used to improve/develop pre-approved verification approaches and/or that the results could be used to add measures to the “deemed savings” list. The allowed values for the credits will not be changed for the utilities that submit these data. They will be used to help the RTF in future deliberations.

The RTF recommends a minimum threshold below which protocols are not required to be submitted for review. Residential non-deemed measures and projects generating 100,000 kWh or less on an annual basis will be excluded from the review process. However, all custom measures still need a verification protocol, they just do not require third party review if they meet these requirements.

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In situations where a utility intends to claim a site-specific protocol based saving, the customer will be required to submit an engineering estimate and a verification plan based on Appendix P. The customer can use the engineering estimate and a deemed value found in Table 2, Section 3.6 of the C&RD Implementation Manual, to determine the potential C&RD credit. The customer will determine the actual C&RD credit by multiplying the verified energy savings by the deemed credit per kWh (\$/kWh) found in Table 2 and multiplying the result by 80%.